

Claims

What is claimed is:

- 5 1. A data processor for digitally signing electronic documents comprising:
a display for displaying data to be digitally signed;
a transducer for receiving the user authorization information and for providing
user authorisation data based thereon; and,
a processor for providing data based on an electronic document for digitally being
10 signed to the display in a secure fashion such that the displayed data is known to be based
upon the electronic document, for receiving the user authorization data, for verifying the
user authorization data against stored template data, and for digitally signing the
electronic document upon determining that the user authorization data is provided from
an authorised user,
15 wherein the processor provides the data based on the electronic document to the
display for review prior to digitally signing the electronic document.
2. A data processor for digitally signing electronic documents according to claim 1
wherein the display, the transducer, and the processor are disposed within a same secure
20 housing.
3. A data processor for digitally signing electronic documents according to claim 2
wherein the secure housing forms part of a personal digital assistant housing.
- 25 4. A data processor for digitally signing electronic documents according to claim 1
wherein the processor and the display include a secure communication path
therebetween.
5. A data processor for digitally signing electronic documents according to claim 4
30 wherein the secure communication path comprises a direct hardware coupling from the
processor to the display.

6. A data processor for digitally signing electronic documents according to claim 5 comprising a second processor for performing general processing functions wherein the processor for digitally signing is a cryptographic processor for performing only security
5 related processing.

7. A data processor for digitally signing electronic documents according to claim 5 comprising a read only memory circuit in electrical communication with the cryptographic processor, the read only memory circuit for storing at least a private key
10 for digitally signing electronic documents.

8. A data processor for digitally signing electronic documents according to claim 1 comprising a second processor for performing general processing functions wherein the processor for digitally signing is a cryptographic processor for performing only security
15 related processing.

9. A data processor for digitally signing electronic documents according to claim 8 comprising non-volatile storage including executable instructions stored therein for performing functions associated with a personal digital assistant.
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10. A data processor for digitally signing electronic documents according to claim 9 comprising a second processor for executing the executable instructions.

11. A data processor for digitally signing electronic documents comprising:
25 a processor for digitally signing electronic documents;
a transducer for receiving user authorization data; and,
a port electronically coupled to the processor for interfacing with a display to provide the processor with control over the display in order to display data for digital signature,

30 wherein the processor provides the data to the display for review prior to digitally signing the data.

12. A data processor for digitally signing electronic documents according to claim 11 wherein the processor, the transducer, and the port are disposed within a same secure housing.

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13. A data processor for digitally signing electronic documents according to claim 11 wherein the processor and the port include executable instructions and hardware for forming a secure communication connection between the processor and the display.

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14. A data processor for digitally signing electronic documents according to claim 13 wherein the port is for coupling with a port of a personal digital assistant and wherein the port provides a direct coupling from the processor to the display of the personal digital assistant bypassing a processor of the personal digital assistant.

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15. A data processor for digitally signing electronic documents according to claim 11 wherein the port is for coupling with a system having a second processor and wherein the port provides a direct coupling from the processor to the display bypassing the second processor.

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16. A data processor for digitally signing electronic documents according to claim 11 wherein the port is for coupling with a secure system having a second processor and a display wherein the secure system is a trusted system.

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17. A method of digitally signing a document comprising the steps of:
providing the electronic document to a secure processor;
displaying data based on the electronic document, the data provided from the processor to a display along a secure communication path therebetween;
receiving authorization data; and
when the authorization data is indicative of an authorization to digitally sign the displayed data, digitally signing the electronic document to provide a signed document.

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18. A method according to claim 17 wherein the processor and the display are within a same secure tamper proof housing.

19. A method according to claim 18 wherein the secure processor is a cryptographic processor for performing only security related processing, and wherein a second processor is provided outside of the secure communication path for performing general processing functions relating other than to security.

20. A method according to claim 19 wherein the secure communication path between the processor and the display is an electronic coupling bypassing the second processor.

21. A method according to claim 18 wherein any instructions in execution on the processor is secure software that is verified by a secure entity.